

## **REMARKS**

Applicant herewith responds to the Office Action mailed 12/20/2006. Applicant thanks the Examiner for his courtesy during the interview conducted on June 12, 2007, during which the Office Action and cited references were discussed. During that interview, Dr. Bjorklund explained the basis for the analysis described below. The following comments summarize the substance of the presentation and discussion during the interviews.

Applicant has reviewed the Office Action carefully, and has fully considered the newly applied reference, Slatkine WO 03/049633 (hereinafter either "Slatkine" or the "'633"). It is noted that the '633 was cited in the Background portion of applicant's patent application. Applicant has also considered the additional references now cited by the Examiner, although it is clear that the Examiner's position rests primarily upon his understanding of the '633.

The Examiner has rejected claims 79-85, 88, 90-95, 97, 98, 101-103, and 105-114 under 35 U.S.C. 102(e) as "being clearly anticipated by Slatkine (WO '633)." The Examiner not provided reference to specific language in support of his rejection, but instead, at page 3 of the Office Action, references the document more generally, as follows:

See generally the entire document, and especially Figures 4a-d, 5d, 6a, 6bg, 7a-c, 8a, 8b, 9a, 9b, 10a, 10b, 1112a, 12b, 13, 14a, 14b, 15e, 15f, 16, 17a and pages 4, 9-11, 14-16, 22-32, and 41-44.

Applicant has reviewed these pages, and the remainder of the '633 reference, carefully, as have two experts whose declarations are attached. As established by the attached Declarations of Joseph W. Goodman and Gary C. Bjorklund, both of whom are experts in the field of laser optics as shown by the resumes attached to their declarations, the '633 reflects a fundamental misunderstanding of what is required to make a laser eye safe.

For example, at page page 7, lines 7-18, of the '633, Slatkine teaches:

As referred to herein, monochromatic light is defined as being divergent when its exit angle from the distal end of the monochromatic light source, or from the distal end of a diverging unit, when used, is greater than a half angle of 6 degrees, wherein a "half angle" is defined as the half angle measured on a plane perpendicular to the propagation axis of a collimated beam generated by the monochromatic light source. With such a divergent angle, protective eyeglasses having an optical density approximately of only 2 are required for the aesthetic laser types specified hereinafter, corresponding to a transmittance of 1%. When the divergent half angle is 20 degrees, protective eyeglasses with an optical density of 1 are required, corresponding to a transmittance of 10%. When the divergent half angle is 60 degrees, no protective eyeglasses are required.

Essentially, the '633 assumes that laser light with a half-angle of 60 degrees is eye safe, and then attempts to achieve that half-angle by various methods, primarily the use of a surface diffuser with a low half-angle coupled with a diverging lens.

In fact, as pointed out by both Professor Goodman and Dr. Bjorklund, simply diverging a laser beam to a half angle of 60 degrees does not make that beam eye safe. Likewise, Slatkine's combination of a diffuser with a low half angle and a diverging lens to achieve a half angle of 60 degrees does not make the resulting beam eye safe. Instead, these devices are dangerous and Slatkine's examples which purport to teach an eye safe device that has sufficient fluence to remove hair in fact are devices which are dangerous to everyone in the room – not just the operator, or the patient, but potentially every bystander. A relevant point is that, if one of ordinary skill in the art were to build a device compliant with the examples shown in the '633 by using the low-angle diffuser and diverging lens as taught there, the resulting device would potentially blind both eyes of an observer or operator or patient, whereas a single laser beam would only damage one eye. Thus such a

device as taught by Slatkine is, in fact, more dangerous than a device without Slatkine's diffusing unit.

Attachments 1 and 2 to Dr. Bjorklund's Declaration establish that, for every one of Slatkine's examples of a purportedly eye-safe design for removing hair, a correct analysis of the resulting beam shows the design NOT to be eye safe. It should be noted that Attachments 1 and 2 show two different approaches to the modeling of the examples in the '633, and both approaches yield the same bottom line: none of these examples in the '633 is eye safe, contrary to the assertions contained in the '633.

It is also important to note that both Prof. Goodman and Dr. Bjorklund conclude that the '633 provides no guidance which would enable one of ordinary skill in the art to balance the conflicting objectives of achieving an optical output which is eye safe, while at the same time being of sufficient fluence to effect a dermatological procedure such as the removal of hair. Both also conclude that nothing in the '633 makes it obvious to one of ordinary skill in the art how to construct an apparatus that uses a light source with sufficient fluence to effect hair removal on a human, and also has an optical diffuser for diffusing the light so that the light emitted from the apparatus is eye safe.

Also accompanying this Amendment are the Declarations of Ronald G. Wheeland, MD, and Suzanne Kilmer, MD. Both declarations establish that, when they first learned of the device that embodies the present invention, they were "astounded" and "amazed" to learn that such a device was possible, and that their peers have had a similar response.

In addition to the aforementioned distinction between applicant's invention and the teachings of the '633, it is also appropriate to point out that certain of applicant's claims include numerous additional features not found in the '633. Thus, the '633 does not disclose the use of a bulk scattering diffuser medium, as required by claims 82 and 110; see Prof. Goodman's Declaration, para. 11. Nor does the '633 teach the use of an optical apparatus which distributes the light substantially

uniformly across the outlet, as required by claims 84, 94 and its dependent claims 95-104, 108, 111-113, and 114; see Goodman Decl., para. 12, and Bjorklund Decl., para. 16. Nor does Slatkine disclose the off-axis feature required by claims 88, 103, and 109, nor the detailed features required by the remaining claims.

A number of the claims have been amended to clarify their scope. None of these amendments were made to overcome the '633 reference, since it is believed that Prof. Goodman and Dr. Bjorklund have plainly established that the '633 reference simply fails to teach an eye safe device for removal of hair as required by applicant's previously submitted claims. Simply put, the '633 reference purports to teach a device which complies with 21 C.F.R. 1040.10 (although the '633 mistakenly refers to it as an ANSI standard), but in fact teaches a device which is not only not compliant with that standard, but is in fact dangerous. In contrast, Applicant's invention teaches a device which complies with both the previously cited IEC 60825-1 standard and the standard set forth in 21 C.F.R. 1040.10, and this is the meaning to be given to "eye safe" in applicant's claims.

As such, it is believed that each of the pending claims is in condition for allowance, and early notification to that effect is earnestly solicited. In the event that any issue remains which the Examiner believes could be facilitated by a telephone call, he is invited to telephone the undersigned at 650-326-4350, or on his cell phone at 650-269-5025. The cell phone is preferred, to minimize phone tag.

Respectfully submitted,



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